

## IMPACT PRO GAS DETECTOR



Cat. No.	Description
2302B20009UE	Impact Pro Multi-Gas Detector
2302B1010	Kit including gas detector, case, cartridge, Enforcer, charger kit, USB cable, and 10 meter sample tube
2302BCD40FCHO	Replacement Cartridge - 12 month warranty. Comes pre-calibrated with instructions for field replacement.
2302BCD42FCHO	Replacement Cartridge - 24 month warranty. Comes pre-calibrated with instructions for field replacement.
2302B0650	Enforcer Calibration Device
2302D0833	Calibration Gas Cylinder

The Impact Pro is safe, small, lightweight, battery-powered and rugged. Detects multiple gases including O<sub>2</sub>, CH<sub>4</sub>, CO, H<sub>2</sub>S. Features one touch calibration. Cartridge replacement can be performed in one minute.

Cartridge design allows you to change all sensors at once - for about the cost of a typical single sensor. Runs on four AA batteries (not included). Rechargeable batteries and charging station are also available. Detectors should be "bump" tested before each use with the Enforcer calibration device.



**Enforcer Calibration Device**

## MICRO 5 GAS DETECTOR



**Cat. No. M5-XWHM-R-D-D-Y-N-00**

Providing protection from potential atmospheric hazards including O<sub>2</sub>, H<sub>2</sub>S, CO, & LEL the Micro 5 is unparalleled in its versatility, capability and overall value. Features include:

- Powered by a lithium rechargeable battery pack (alkaline models available)
- Audible, visual and vibrating alarms
- Compatible with MicroDock II Automatic Test and Calibration Station
- Datalogging to store event information
- Self-test confirms sensor, battery and circuitry integrity and audible/visual alarms on activation
- Other models available for different combinations of gases. Models with an integral motorized pump for remote sampling are available as well.



**Docking Stations Also Available**

## QUATTRO GAS DETECTOR

**Cat. No. 2302BCD40FCHO**

This four-gas detector features simple one-button operation. The graphic LCD displays all four gas concentrations (H<sub>2</sub>S, CO, O<sub>2</sub> and combustibles) and shows easy to identify icons that indicate operational information, such as bump test and calibration status. Optional attachable pumps available.



- IntelliFlash verifies operation and compliance to both the user and supervisors from up to 20 ft.
- Field-proven Surecell sensors offer an unprecedented performance, even in the harshest environments
- Audible, visual and vibrating alarm
- Flexible, interchangeable battery options with extended runtimes
- Full function self-test is initiated upon activation and runs continuously during operation
- Extensive datalogging capability

## HAND CRANKED MEGOHMMETER 250V-1000V

**Cat. No. 6503**

- Test voltages of 250V, 500V, 1000V
- LED indicates constant voltage output and proper cranked speed
- Automatic discharge when measurement is finished
- Auto-ranging dual scale operation for better sensitivity and easier readings



## DIGITAL/ANALOG MEGOHMMETER 500V-5000V

**Cat. No. 5060**

- Test voltage combination of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 1k ohm to 10T ohm
- Adjustable and programmable test voltage (50 to 5000V)
- Automatic calculation of DAR, PI and DD ratios, Capacitance and Leakage Current
- Display resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Automatic test inhibition if live sample (>25)
- Automatic discharge and display of discharge voltage



## DIGITAL MEGOHMMETER 500V-15KV

**Cat. No. 6555**

- Test results and configuration information is provided on an LCD screen as well as exportable through DataView® software.
- Measurements at a fixed test voltage of 500, 1000, 2500, 5000, 10,000 or 15,000VDC
- Ramp voltage measurements with a ramp from 40 to 1100V or from 500 to 15,000V
- Step voltage measurements with steps from 40 to 15,000V



## CLAMP-ON GROUND RESISTANCE TESTER

Measures ground rod and small grid resistance without the use of auxiliary ground rods.

- Clamp-on operation - no leads, no auxiliary rods or spacing requirements.
- Direct reading of ground resistance from 0.01Ω to 1200Ω
- Direct reading of continuity and ground loop resistance
- Direct reading of ground leakage or phase current (1mA to 30Arms)
- 1.25" jaw (up to 1000MCM cable)



Cat. No.	Description
3711	Clamp-On Tester
3731	Clamp-On Tester with alarm & memory functions

## DIGITAL GROUND RESISTANCE TESTER KIT

**Cat. No. 4630K**

Performs ground resistance (2 & 3 point) and soil resistivity (4 point) tests. Measures from 0 to 2000Ω, and is auto-ranging.

It is designed to reject high levels of interference, so it can be used under difficult conditions such as high stray currents that normally affect accuracy. Powered by 9.6V, 3.5 Ah NiMH rechargeable batteries.



## FALL-OF-POTENTIAL GROUND RESISTANCE TESTER KIT

**Cat. No. 3640K**

- LCD display
- Rejects high levels of interference
- Auto-Ranging
- Battery powered
- Measure ground resistance (2- & 3-Point)



Includes meter, one 16 ft lead, two 150 ft leads on spools with wind-up handles, two auxiliary ground electrodes, soft carrying case, batteries and user manual.



## CLAMP-ON MULTIMETERS

### Cat. No. 502

- 400AAC current measurements
- 600VAC/DC volts measurements
- TRMS measurements
- Resistance measurements to 400Ω
- Hold function to "freeze" readings
- Large easy-to-read display
- Includes test leads and a soft carrying pouch



### Cat. No. 512

- 1000AAC current measurements
- 750VAC/1000VDC volt measurements
- TRMS measurements
- Resistance measurement to 4000Ω
- Diode test
- Hold function to "freeze" readings
- Large easy-to-read display
- Includes test leads and soft carrying pouch



## V-WATCH

The V-Watch personal voltage detector detects the presence of electric fields surrounding electrical equipment. This lightweight device is compactly designed to be worn on the outside of clothing or protective gear.

Features audible and visual alarms that increase in frequency as you approach energized equipment. 9V alkaline battery is replaceable in the field. V-Watch Pro features a mute button.



Cat. No.	Description
VW-20H	V-Watch with Carrying Case Lanyard
VWP-20H	V-Watch Pro with mute button and Carrying Case Lanyard
VW-20H-K	V-Watch with Carrying Case Lanyard and Zippered Carrying Bag
VWP-20H-K	V-Watch Pro with with Carrying Case Lanyard and Zippered Carrying Bag

## HALO I AMMETER



Halo I is a true RMS high voltage digital ammeter, 0-2000 amps AC. It is ideally suited for taking spot-load studies at transformers or at any mid-span location, as well as phase balance studies on primary or secondary lines.

Halo I is a true RMS reading instrument. Its load-latching circuitry continually latches and locks on to peak system currents. It will display and hold the reading until the display is reset.

Cat. No.	Description
8280	Halo I, Hook Style Head
8281	Halo I, Fork Style Head
HC-5	Halo carrying case and a 2' hotstick or extension hotstick

## HALO II AMMETER



Halo II is suited for the same type of operations as the Halo I. It is also a true RMS high voltage ammeter (0-2000 amps AC). It features a decimal point display through 199.9 amps and is auto ranging.

It offers the enhancement of having a selectable "peak-hold" or "track" mode. The "peak-hold" operates the same as Halo I, while the "track" allows you to view continuous changes on the display.

Cat. No.	Description
9390	Halo II, Hook Style Head
9391	Halo II, Fork Style Head
HC-5	Halo carrying case and a 2' hotstick or extension hotstick

## ELECTRONIC "TAG" VOLTAGE DETECTORS

Cat. No.	Description
T200-0412	TAG200 (4-12KV), "Y" Probe, Straight Probe, & Case
T200KIT-0412	Same as above, but also includes underground bushing probe
T200-1235	TAG200 (12-35KV), "Y" Probe, Straight Probe & Case
T200KIT-1235	Same as above, but also includes underground bushing probe
T200MR	TAG200 with Multi Range (4-69KV), "Y" Probe, Straight Probe & Case
TAG-200MRKIT	Same as above, but also includes underground bushing probe
TAG-330	TAG330 (69-765KV), Straight Probe, Small Hook Probe, Large Hook Probe & Case



## ACCESSORIES

Cat. No.	Description
IEP-UDC	Underground Bushing Probe (15, 25 & 35KV)
IEP-EAC	Underground Elbow Probe (15, 25 & 35KV)
TAG-42029	Overhead "Y" Probe for 200 series
TAG-41811	Overhead Straight Probe for 200 series
TAG-EFT200	Retaining Nut for 200 series
PT-DET	Tester for Voltage Detector up to 69KV
TAG-AD100	Overhead 4" Straight Probe for TAG330
TAG-AC60	Overhead Small Hook Probe for TAG330
TAG-AC120	Overhead Large Hook Probe for TAG330

When in contact with an energized conductor, the TAG emits an audible and visual alarm. Requires direct contact with the conductor to detect voltage and must be operated within their voltage range (factory set to user requirements).

- Distribution models (TAG-200 and TAG-200MR) are for voltages up to 69kV (phase-to-phase)
- Transmission model (TAG-330) is for system voltages from 69kV up to 765kV (phase-to-phase)
- Rugged polycarbonate housing for heavy field use
- Water resistant / gasketed housing
- All-Check self testing system
- No on/off or range selector switches
- Built-in universal spline for hotstick attachment
- 9-volt alkaline battery operated

## DIGITAL MULTIMETER

Cat. No. 5233

Rugged, economical TRMS digital multimeter with a function for non-electrical contact testing.

- AC voltmeter with low input impedance
- AC/DC voltmeter with high input impedance
- Ohmmeter, Continuity test with buzzer, Diode test and Capacitance functions



## INFRARED THERMOMETER

Cat. No. IR3000

Features dual lasers that allow you to see the actual target diameter. Measurement range: -76° to 1400°F (-60° to 760°C). Includes case, (2) AAA batteries, thermocouple, and protective boot.



## DIGITAL VOLTAGE INDICATOR



Cat. No. DVI-100

The Digital Voltage Indicator is designed to read the voltage on a conductor up to 99kV line-to-ground. Features a large LED readout which is easy-to-read on the end of a long hotstick.

When brought into direct contact with a conductor, the display indicates the line-to-ground voltage level. Powered by a 9V alkaline battery.

## SELF TESTING VOLTAGE DETECTOR (240V-500KV)

Self-Testing Voltage Detectors allow testing to be continuous and automatic. An intermittent flash and beep confirms the detector is functioning properly. Used to verify live or de-energized conductors, these testers may be used with rubber insulating gloves or hot sticks.

Testers indicate the presence of voltage with an extra bright LED light and a distinctive audible signal. It is recommended that the tester be moved closer to the conductor until a warning is indicated, or it touches the conductor, apparatus, or elbow test point. Requires three "C" batteries (included).



KIT SHOWN WITH  
CASE & UNIVERSAL  
ADAPTER

Cat. No.	Settings (Phase to Phase)
4544	Off / 240V / 4.2KV / 15KV / 25KV / 35KV / 69KV / 115KV / 230KV
4644	Off / 240V / 4.2KV / 35KV / 69KV / 115KV / 230KV / 345KV / 500KV
4744	Off / Test-240V / Battery / Underground (15KV, 25KV, 35KV) / Overhead (4.25KV, 15KV, 25KV, 35KV, 46KV, 69KV)
4315	Molded Case
21600	Replacement Handle
20872	Replacement Battery Strap
Add suffix "K" for KIT which includes Case & Universal Adapter	

## PROXIMITY VOLTAGE INDICATOR (40KV)



Made in the  
**USA**

This Voltage Indicator detects voltage as a proximity meter on overhead and underground systems, but can be used as a direct contact detector as well. Features an Audible and Visual alarm to indicate the presence of voltage with an operating range from capacitive test points/secondary voltage to 40KV (line to ground).

- Incidental direct contact will not damage the unit
- Watertight construction
- 1 Year Warranty
- Super bright LEDs and ultra loud horn
- Standard universal/grip all adapter included

Cat. No.	Description
AV40	40KV Voltage Indicator
81280LHM	Hook Probe Adapter
81280LPM	Straight Probe Adapter
VDA18B	Case

## PROXIMITY VOLTAGE INDICATOR (120V-500KV)



**NEW**

This non-contact detector has nine standard voltage ranges from 120V to 500KV. When voltage is detected, an audible and visual indicator signals. Can also detect voltage on elbow test points at the 120V setting.

- Dual hotstick connections- universal spline & shotgun stick
- Loud beeper and LED lights indicate voltage
- Waterproof design
- Rechargeable battery with quick recharge
- Weighs less than 1 pound
- Easy to use electronic touch pad with large buttons
- Can be used on 50Hz and 60Hz systems

Cat. No.	Description
PRX-500	Voltage Indicator with holster, charger cords, and case
PRX-500B	Voltage Indicator with holster, charger cords, and carrying bag
PRX-500H	Voltage Indicator with holster and charger cords (no case)
050-0030-PRX	Replacement Battery



## AUTO-RANGING VOLTAGE INDICATOR (600V-69KV)



Provides easy, yet reliable means for operator to determine if a line is De-energized, Carrying less than normal system voltage from any source or induced charged from an adjacent live circuit, or Energized at full system voltage. Features:

- State-of-the-art electronics eliminate need for selector switch
- Automatic-ranging function quickly displays approximate line-to-line voltage class
- Attaches to an Epoxiglas insulating universal handle
- Single pushbutton activates the instrument
- Performs a confirming self-test
- Begins detecting at approximately 480 Volts and holds display of one of these voltage classes: 600V, 4KV, 15KV, 25KV, 35KV or 69KV phase-to-phase

Cat. No.	Description
C403-3374	Auto Ranging Voltage Indicator with shepherds hook probe, manual & case
T403-3418	Kit including all of the above plus elbow adapter, bushing adapter, and voltage indicator tester
CC-ARVI	Replacement case

## AUTO-RANGING VOLTAGE INDICATOR (69KV-500KV)



Same as above, but for high voltage overhead applications. Begins detecting at approximately 69KV and holds display of one of voltage classes: 69KV, 115KV, 161KV, 230KV, 345KV or 500KV phase-to-phase

Cat. No.	Description
C403-3375	Auto Ranging Voltage Indicator with shepherds hook probe, manual & case
CC-ARVI	Replacement case

## AUTO-RANGING VOLTAGE INDICATOR (FULL RANGE: 600V-500KV)



Same as above, but features a full range from 600V-500KV. Begins detecting at approximately 100V and holds the display of one of these phase-to-phase voltage classes: 600V, 4kV, 15kV, 25kV, 35kV, 69kV, 115kV, 161kV, 230kV, 345kV or 500kV.

Cat. No.	Description
PSC403-2915	Auto Ranging Voltage Indicator with hook probe, manual & case
CC-DUAL-ARVI	Replacement Case

## ACCESSORIES

Cat. No.	Description
T403-0857	Bushing Adapter for 15KV, 25KV, 35KV underground applications
T403-0856	Elbow Adapter for 15KV, 25KV, 35KV underground applications
C403-3409	Voltage Indicator Tester (to test meter)


**T403-0857**

**T403-0856**

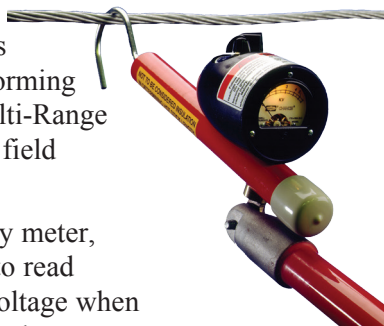
**C403-3409**

## MULTI-RANGE VOLTAGE DETECTOR

### For Overhead Systems to 600KV & URD Elbow Test Points

To confirm that a line is de-energized prior to performing maintenance on it, the Multi-Range Voltage Detector presents field practicality.

Actually a field intensity meter, this detector is calibrated to read approximate line-to-line voltage when connected to any phase conductor.



Cat. No.	Description	Range	Repl. Case
C403-0979*	Overhead/Under-ground Model	1-40KV	CC-MRVD
C403-1029	Overhead Model	16-161KV	CC-MRVD
C403-1140	Overhead Model	69-600KV	CC-MRVD- 1140
<b>All include plastic case</b> <b>*Includes straight probe and "TP" setting on selector switch for URD elbow testing.</b>			

## TRANSFORMER & CAPACITOR TESTER

### Cat. No. 6793

Tests the condition of transformers and capacitors before placing them into service as well as trouble shoot in-service units.



Hand held tester provides a safe and reliable method of verifying that distribution transformers, up to 3300 KVA, do not have shorted or open windings prior to energizing.

Eliminate blowing cutout fuses to determine condition of the transformer.

## TRANSFORMER RATIOMETER

### Cat. No. 8510

Designed for on-site testing of power, potential and current transformers.

- Ratio Testing: PT/VT from 0.8000:1 to 8000:1 and CT from 0.8000 to 1000.0
- Tests performed by exciting the primary and reading the secondary
- Continuity test indicates open or loose terminal connections



## VOLTAGE TESTER

Solid state design is safer than solenoid testers. Low impedance to reduce false readings. Indicates voltage without battery.

Voltage indicated by lights, vibration and tone. With continuity beeper and bright work light.



Cat. No.	Description
ET200	Voltage Tester
69401	Storage Case

## MEGA BEAST

Service conductor tester, fully self-contained 80 Amp load with Digital Meters. Meters register from 84-264 VRMS.

Combo kit features additional plug-in meter socket adapter and standard three clip connection, Total of 10' cable lead from box. Kit includes Mega Beast, meter base adapter, pulsing adapter, & carrying bag.



Cat. No.	Description
900-D-COMBO	Mega Beast Kit
900-D	Mega Beast only



## SUPER BEAST

Service conductor tester, fully self-contained 20 Amp load. Both digital and analog meters available.

Quickly and accurately detects open neutral. Verifies condition of secondary conductors and associated connections.

Kit includes Super Beast, meter base adapter, and carrying bag.



Cat. No.	Description	Range
469-SCO	Analog Super Beast Kit	0-150V AC
469-S	Analog Super Beast	0-150V AC
469-DSCO	Digital Super Beast Kit	84-264V AC
469-D	Digital Super Beast	84-264V AC

## DIGITAL VOLTMETER (0-2KV)



Cat. No. RCDC1000U

- General purpose 0-2KV digital voltmeter can be used in a wide variety of commercial and industrial applications.
- Designed to confirm the status of electrical systems
- Can be used with higher currents than hand held models
- Large digital LCD display
- Unit includes three adapters: hook adapter, straight adapter, and magnetic track adapter
- Weather resistant
- 30 foot interconnecting cable and carrying case are included



## PROXIMITY & DIRECT CONTACT

### ANALOG VOLTAGE DETECTOR (0-40KV)



- Dual application analog voltage detector detects 0-40KV line to ground (0-69KV phase to phase).
- Proximity or direct contact on overhead and underground systems with an easy to read analog scale
- Detects voltage from the ground on bare overhead lines when hand held
- Tests secondary voltage on bare or insulated cables
- Tests capacitive test points
- Indicates line to ground values for nominal or induced voltages
- Five position selector switch is calibrated for height above ground and includes:

1. **URD** - Detects voltage on underground systems
2. **OH** - Detects overhead voltage (0KV-10KV)
3. **X4** - Detects overhead voltage (11KV-40KV)
4. **T** - Tests and verifies meter function
5. **P** - Indicates voltage in proximity to line

Cat. No.	Description
VDA040PU	Voltage Detector
VDAL40PU	Voltage Detector with back light
VDA040CU	Voltage Detector without proximity function
Storage case included with all detectors. Add "S" to Cat. No. to include Bushing Adapters	



## ANALOG VOLTAGE DETECTOR (2.4-450KV)



- Wide range transmission and distribution voltage detector for overhead and underground
- Meter is passive, battery is only required for the test position
- Linear/logarithmic scale for better resolution from distribution to transmission systems
- Meter reads approx. nominal or induced voltage line to ground
- Requires no voltage scale selectors or multipliers
- Water resistant
- Hold and backlight available on select models.

Cat. No.	Description	Line-To-Ground	Phase-to-Phase
VDA0300U	Voltage Detector	2.4KV-300KV	4KV-500KV
VDAH300U	Voltage Detector with "Hold" and Backlight	2.4KV-300KV	4KV-500KV
VDA0450U	Voltage Detector	2.4KV-450KV	4KV-765KV
VDAH450U	Voltage Detector with "Hold" and Backlight	2.4KV-450KV	4KV-765KV

Storage case included with all detectors.  
Add "-S" to Cat. No. to include Bushing Adapters





## DIGITAL PHASING VOLTMETERS (0-50KV)

PD25US SHOWN



These multi-purpose phasing voltmeters are designed to replace numerous other meters that feature a single range and/or perform a single function. Use as:

- Digital Voltmeter
- Capacitive Test Point Phasing Meter
- Regulator Neutral Detector
- Commercial/Industrial Meter
- Conventional Phasing Voltmeter



Measure voltage and phasing on overhead and underground systems, capacitive test points and 3-phase secondaries. PD25U has three ranges: 2KV, 20KV & 25KV. The PD50U also has three ranges: 2KV, 20KV & 50KV.

Features a large LCD digital meter with backlight, a 5-position selector switch, and an interconnect cable and a second probe to complete the circuit.

Unique input circuitry measures and reconciles the undesirable charging currents associated with other phasing meters, providing great accuracy (+/- 1%). Will test AC or DC.

Cat. No.	Description
PD25U	Phasing Voltmeter (0-25KV Phase-to-Phase)
PD50U	Phasing Voltmeter (0-50KV Phase-to-Phase)
PA100P	100V DC Power Supply to test meter
Storage case & 3KV power supply included with all detectors. Add "-S" to Cat. No. to include Bushing Adapters	

## ANALOG PHASING VOLTMETER / VOLTAGE DETECTOR (300V-35KV)



This "utility tough", *dual application* meter is designed to be used as either a Voltage Detector or a Phasing Voltmeter.

Features a large, easy-to-read analog meter, a five position selector switch, 3kV self-test device, interconnect cable and a second probe to complete the circuit. Adapters are available for underground use up to 35kV. Each probe is completely shielded to minimize stray field indications.

The five position switch control consists of:

- C - Indicates voltage on capacitive test points
- CP - Phases using capacitive test points
- L - Detects overhead and underground voltage
- LP - Phasing on overhead lines
- BT - Battery Test



Cat. No.	Description
81280U	Phasing Voltmeter (300V-25KV)
83280U	Phasing Voltmeter (300V-35KV)
Storage case & 3KV power supply included with all detectors. Add "-S" to Cat. No. to include Bushing Adapters	

## PHASING RANGER (20V-765KV)

The Phasing Ranger is easy to use when determining phase relationship in the field. All readings are Real Time readings, there are no calculations to be made or data to be transferred from one location to another.



Requires a one time set-up procedure and then allows the user a permanent and reliable means of phasing, phase ID, mapping and tagging or general troubleshooting.



### Phasing Ranger Kit Includes:

- Send Unit
- Receive Unit
- Meter Probe
- Auto Answering Device
- GPS receiver
- Trac-Fone
- (1) Straight Probe
- (1) Hook Probe
- Instruction Manual
- (2) Carrying Case

Cat. No.	Description
PR1COMP	Complete Phasing Ranger Kit
PR1RCV	Phasing Ranger Receive Unit
PR1SEND	Phasing Ranger Send Unit
81280LPM	Straight Probe
81280LHM	Hook Probe
PD800B	Carrying Case

## CORDLESS PHASING TESTER



### Cat. No. PD800WU

This Cordless Phasing Tester operates in multiple applications including Cordless Phasing, Voltage Detection (4KV-69KV), Phase Sequencing, & Phase Angle Indication.

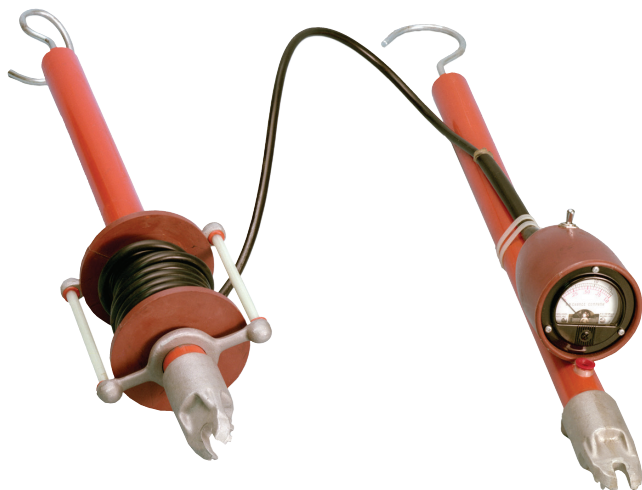
- Use for three-phase secondary systems, capacitive test points, URD systems, and overhead and transmission/substation systems
- FCC licensed wireless technology does not require an interconnecting cable or extension resistor.
- Operating range of 100 feet
- Cordless phasing tool direct contact (120V-69KV) and non-contact (69KV-800KV)
- Both probes feature high intensity color coded LED indicator lights
- Probes are impact and water resistant
- Probes are completely shielded to minimize stray field interference
- Large, digital display with backlight
- Kit includes Reference Probe (transmitter), Meter Probe (receiver), Universal Attachment, & Padded Case

Both probes have a five-position selector switch that controls different operating modes.

1. **Off** - Power off for storage
2. **Deg** - Measures the phase angle between the two probes, 208V - 800kV
3. **URD** - For phasing and voltage detection on Underground Rural Distribution systems from 4kV - 35kV
4. **OH** - For phasing and voltage detection on overhead systems 4kV - 69kV
5. **Test** - Tests meter function and battery



## PHASING TESTER FOR DISTRIBUTION CIRCUITS



Determine phase relationships and approximate voltage, line-to-line or line-to-ground.

- Feature two fiberglass poles with end fittings threaded for interchangeable probes
- Probe fittings couple with a high-impedance component encased in each pole
- To complete test circuit, a 22 ft. length of insulated flexible cable stores on reel affixed to one pole and connects to voltmeter on other pole
- Simple to operate, tester poles first attach to two 6 ft. Epoxiglas insulating universal handles (included in each kit for proper working clearances)
- Probes can be brought into contact with conductors appropriate for the meter to read phase-to-phase or phase-to-ground voltage
- **Extension Resistors** can be used to extend any 16kV Phasing Tester for 48kV or 80kV application.

Cat. No.	Description	Repl. Case
H1876	16KV Tester Kit*	H1876-3
H1876-1	16KV Tester, Hook Probes, Case & Manual	H1876-3
T403-2261	25KV Tester Kit*	H1876-3
H1876-7	40KV Tester, Hook Probes, Case & Manual	H1876-3-40-25
H1876-4	Pr. 25" Extension Resistors for up to 48KV	--
H1876-2	Pr. 43" Extension Resistors for up to 80KV	--
P624-2	Bag for 48KV Resistors	--
P624-4	Bag for 80KV Resistors	--

\*Kits include two (H1760-1) 1-1/4" x 6' Epoxiglas Universal Poles, storage bag, tester, hook probes, case & manual

Additional URD Accessories on Pg 119

## PHASE ROTATION TESTER



To determine the correct phase-rotation relationship, this portable instrument features construction similar to Phasing Tester H1876-1 with an additional grounding circuit for phase rotation testing.

- Tester consists of two fiberglass poles with end fittings threaded for interchangeable probes
- Probe fittings couple with a high-impedance component encased in each pole
- 22 ft. length of insulated cable stores on reel affixed to one pole and connects to voltmeter on other pole
- Grounding terminal below the meter permits connection to a known ground for proper operation
- Attaches to Epoxiglas Universal Poles
- Meter displays up to 16 kV alone
- Can also read circuits through 80 kV with the thread-on Extension Resistors

Cat. No.	Description
H1879	16KV Phase Rotation Tester & Case
H1876-4	Pr. 25" Extension Resistors up to 48KV
H1876-2	Pr. 43" Extension Resistors up to 80KV
P624-2	Bag for 48KV Resistors
P624-4	Bag for 80KV Resistors
H1876-3	Replacement Case for H1879 Tester

## DC HI-POT URD TEST ADAPTER

For quick, reliable fault detection on underground cables, two units are available for phase-to-phase system voltages up to 16kV and 35kV. For use with H1876-1 Phasing Tester and Elbow or Bushing Adapters.

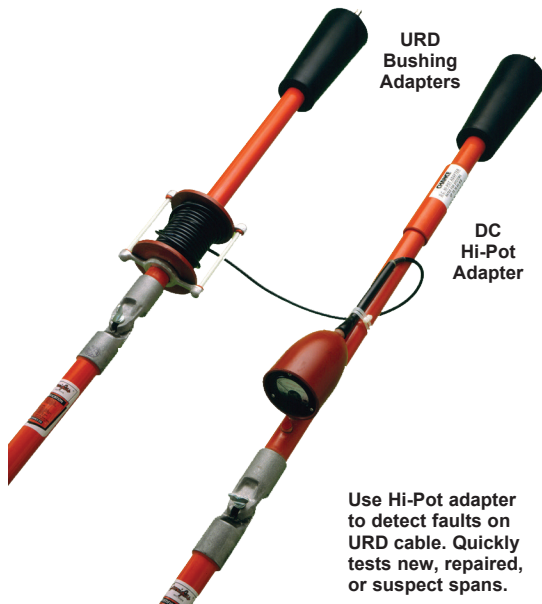
- **TEST NEW CABLE BEFORE INITIAL ENERGIZING**
- **TEST REPAIRED CABLE BEFORE RE-ENERGIZING**
- **TEST SUSPECT CABLE SPAN FOR FAULTS**

Cat. No.	Description
C403-1762	16KV Hi-Pot Adapter*
C403-1763	35KV Hi-Pot Adapter*
*Maximum phase-to-phase system voltage	





## DISTRIBUTION PHASING TESTER



**Designed for Overhead and Underground Systems with Dual Range: 5kV & 16kV Scales.**

- Basic functions include identifying phases and reading line-to-line or line-to-ground voltage
- URD accessories in the Kit also permit cable-fault detection
- Consists of high-impedance components encased in two fiberglass poles with threaded end fittings for overhead probes or URD adapters
- A 22 ft.-long cable connects to voltmeter pole and stores on reel pole
- To detect faults on URD cable, Hi-Pot Adapter converts AC source to DC pulse
- Effective field method quickly tests new, repaired or suspect spans
- To check instrument before and after use, Phasing Meter Tester lead plugs into testpoint jack by meter
- Switch on Meter Tester reverses polarity for thorough field-checking procedure

Cat. No.	Description
T403-2557	Phasing Tester Kit
C403-1762	16KV Hi-Pot Adapter
T403-0857	URD Bushing Adapter (2 needed)
C403-0838	Phasing Voltmeter Tester
H1876-3	Replacement Case for T403-2557

### Phasing Tester Kit Includes:

- Dual Range Tester with 5KV & 16KV scales
- (2) 6' x 1-1/4"-dia. Epoxiglas universal handles with storage bag
- Shepherds Hook Probe
- Pigtail Hook Probe
- 16KV Hi-Pot Adapter
- (2) URD Bushing Adapters
- Phasing Voltmeter Tester
- Instruction manual
- Padded carrying case



C403-1762



T403-0857



C403-0838

## TESTER ACCESSORIES

Cat. No.	Description
T403-0602	Elbow Adapter for 8.3KV & 15KV
T403-0428	Bushing Adapter for 8.3KV & 15KV
T403-0856	Elbow Adapter for 15KV, 25KV & 35KV
T403-0857	Bushing Adapter for 15KV, 25KV & 35KV
H1876-6P	Pigtail Hook Probe
H1876-6S	Shepherd Hook Probe
H1876-6	Straight Probe



T403-0428



T403-0857



T403-0856

## NEUTRAL DETECTOR



The Regulator Neutral Detector insures that the operator has the regulator in its neutral position prior to disconnecting the regulator from the circuit

- Eliminates high or low voltages caused by cycling the regulator to the upper or lower limits and then counting steps back to neutral
- Works with step type and induction type regulators
- 0 - 2000 volt range is shown in one volt increments
- Works with all regulators up to and including 34.5KV systems
- No range selector is required
- Digital display with 1/2" tall LCD digits for easy viewing
- Lighted meter for use at night can be switched on by the operator
- 9 volt battery included

Cat. No.	Description
6709-1	Neutral Detector
A30113	Replacement Carrying Case

## VOLTAGE DETECTOR (30V-122KV)

### Cat. No. TIC300PRO

Detects AC voltage without connection via an audible signal and visual indicator.

Check high-voltage transmission lines, power distribution equipment, and downed power lines as well as lower voltage for fuses, breaker panels and power outlets. Lightweight and rugged with integrated switch guard.

Features two measurements ranges: 1500V and 122KV, and adapts to a Hot Stick for voltages above 122kV.



## ROTATION PHASE SEQUENCE INDICATOR

This rugged and reliable instrument has a 25 - 60 frequency range and a voltage range of 60V - 600V



Cat. No.	Description
44030	Rotation Phase Sequence Indicator
44040	Carrying Case

## PHASE ROTATION TESTER

### Cat. No. 6609

This tester features:

- Indication of live phase presence or phase absence
- Determination of a motor's rotation direction with or without contact
- Automatic testing
- Phase and motor rotation indicators
- Color-coded leads and alligator clips



## PHASE/MOTOR ROTATION TESTER

### Cat. No. 6610

Phase meter with voltage sensing detector clips designed to identify phase rotation on 3-phase systems and live and open/de-energized phases.

- Operating voltage: 75 to 1000VAC
- Frequency range: 45 to 65Hz
- Phase rotation LED indicators



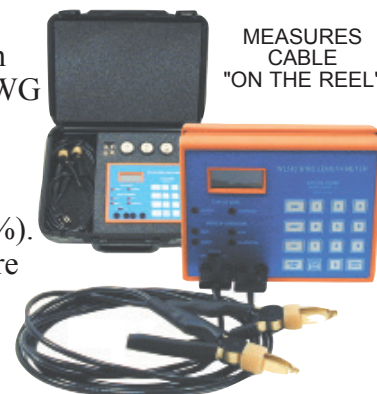
## WIRE LENGTH METER

### Cat. No. WL140

Measures reels of both stranded and solid, 24AWG to 1000MCM wire and cable up to lengths of 20,000'.

Digital reading (+/- 1%). Auto ambient temperature adjustment.

*Includes: alligator clips, insulation piercing assemblies, probe leads, batteries and case.*



MEASURES  
CABLE  
"ON THE REEL"

## WET/DRY HOT STICK TESTER



### Cat. No. C403-3178

This 115V portable unit tests insulated live-line tools. It features wet and dry modes selected by a toggle switch and follows procedures specified by ASTM, IEEE and OSHA. Graduated meter gives precise readout of each tool's leakage current.

For testing any length fiberglass-reinforced plastic (FRP) hot stick up to 3 inches in diameter.

Will test both Wet 75kV-per-foot and Dry 100kV-per-foot in a self-contained unit. The tester detects leakage currents due to surface contamination, internal moisture and such internal conductive materials as carbon tracks.

## GROUND SET TESTER



This self contained tester uses micro-processor technology to check the resistance in protective grounding sets. Powered by 120 VAC, the tester applies Direct Current across the test specimen.

The digital display shows the resistance measured in milliohms compared with a preset threshold for the size grounding cable selected.

A green "pass" or red "fail" light also indicates the test result's relation to the adjustable threshold.

Cat. No.	Description
C403-3220	Ground Set Tester
C403-3449	Elbow Adapter
T403-3159	Straight Stud Terminal

## FIBERGLASS TESTING & RESTORATION

Hi-Line restores and tests hot sticks, arms, ladders and other fiberglass equipment to like new condition.

Fiberglass tools often get scuffed and damaged over time, rendering them potential safety hazards. These tools are usually stashed in warehouses: too expensive to throw out, too questionable to use in the field. Hi-Line's Fiberglass Restoration program can turn this warehouse clutter into usable product that meets ASTM standards.



## GROUPS TESTING & REPAIR

Hi-Line offers repair, cleaning, testing & certification services for grounds and jumpers.

Hi-Line tests and refurbishes over 400 sets of grounds and jumpers per week. Testing intervals and a date stamp for each device can be established based on company specifications. Hi-Line's facilities in Elgin, IL and Millbury, MA offer professional service and a fast turnaround to meet your needs.

